

### REMARKS-General

1. The applicant amends the title of the instant invention from "Full Interchange Urban Road System and Traffic Method of Using It" to "Full Interchange Urban Road System".

2. The newly drafted independent claim 21 incorporates all structural limitations of the originally amended claim 11 and includes further limitations previously brought forth in the disclosure. No new matter has been included. All new claims 21-35 are submitted to be of sufficient clarity and detail to enable a person of average skill in the art to make and use the instant invention, so as to be pursuant to 35 USC 112.

3. With regard to the rejection of record based on prior art, Applicant will advance arguments to illustrate the manner in which the invention defined by the newly introduced claims is patentably distinguishable from the prior art of record. Reconsideration of the present application is requested.

### Response to Rejection of Claims 11-20 under 35USC112

4. The applicant submits that the newly drafted claims 21-35 particularly point out and distinctly claim the subject matter of the instant invention, as pursuant to 35USC112.

### Regarding to the Rejections of Claims 11-19 under 35USC102

5. The examiner rejected claims 11-19 under 35USC102(a) as being anticipated by Lee (WO 01/94702). Pursuant to 35 U.S.C. 102, "a person shall be entitled to a patent unless:

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent.

6. However, the Lee patent application and the instant invention are **not the same invention** according to the fact that the disclosure of Lee patent does not read upon the instant invention and the newly drafted independent claim 21 of the instant invention does not read upon Lee patent either.

7. The applicant respectfully identifies the differences between the instant invention and Lee for the purpose of overcoming the rejections under 35USC102(a) as follows.

8. Regarding the newly drafted independent claim 21, Lee fails to anticipate an urban road system, comprising at least a ground motorway **exclusively for use by motor vehicles**; and a manway **exclusively for use by pedestrians**, wherein the manway is built and positioned above the motorway at a predetermined elevation with respect to the motorway so as to define a **double-layer road structure** having a manway layer and a road layer, so that the motorway adapted for supporting a predetermined volume of traffic flow while minimizing an adverse impact of the traffic flow on the manway, so that urban forestation and social activities are allowed to carry out on the manway layer without being affected by the traffic flow of the road layer. In the instant invention, the urban road system consists only of a motorway and a manway, while the transportation system disclosed in Lee consists of many layers of roads for motor vehicles.

9. The main patentable subject matter of the instant invention is to form a community transportation network which substantially divides traffic flow and pure pedestrians activities. On the other hand, Lee merely discloses a multi-lawyer road system comprising at least two floor with an inter-floor road for securing parking and living spaces, wherein buildings entry or exist are provided at starting points of the multi-layer roads, and intersection points between the multi-level roads. The applicant respectfully submits that this is totally different from the features claimed in the instant invention. In the instant invention, each of the two layers of roads is exclusively dedicated for different uses, whereas in Lee, the roads of multi-layer structure are largely used for the same purpose.

10. In the instant invention, social activities and traffic are completely separated so that there is no need for unnecessary traffic lights and the risk of traffic accidents involving pedestrians can be minimized or even eliminated. Furthermore, the instant invention provides a solution to the overall city planning as a whole, and not merely a particular traffic flow solution. When the instant invention has been implemented in a particular city, people living that city would have enjoyed a quiet

environment (since traffic flow is largely confined to lower layer of roads), wherein air pollution problem would also be minimized.

### **Response to Rejection of Claims 11-19 under 35USC103**

11. The Examiner rejected claims 11-19 under 35USC103(a) as being unpatentable over Lee. Pursuant to 35 U.S.C. 103:

“(a) A patent may not be obtained though the invention is **not identically** disclosed or described as set forth in **section 102 of this title**, if the **differences** between the subject matter sought to be patented and the prior art are such that the **subject matter as a whole would have been obvious** at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.”

12. In view of 35 U.S.C. 103(a), it is apparent that to be qualified as a prior art under 35USC103(a), the prior art must be cited under 35USC102(a)~(g) but the disclosure of the prior art and the invention are not identical and there are one or more differences between the subject matter sought to be patented and the prior art. In addition, such differences between the subject matter sought to be patented **as a whole** and the prior art are obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains.

13. In other words, the differences between the subject matter sought to be patent as a whole of the instant invention and Lee which is qualified as prior art of the instant invention under 35USC102(a) are obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains.

14. The applicant respectfully submits that the differences between the instant invention and Lee are not obvious under 35USC103(a), due to the following reasons.

15. The examiner is of the view that Lee discloses more than levels than it appears applicant is attempting to limit the claims to. The applicant respectfully submits that the examiner has failed to correctly apply rejection under 35USC103(a).

16. The applicant respectfully submits that to reject claims in a patent application under 35 U.S.C. 103, the Examiner must show an un rebutted prima facie case of obviousness. See *In re Deuel*, 51 F.3d 1552, 1557, 34 USPQ2d 1210, 1214 (Fed. Cir. 1995).

17. A prima facie case of obviousness requires setting forth:

- (a) the differences in the claim over the applied references,
- (b) the proposed modification of the applied references necessary to arrive at the claimed subject matter, and
- (c) an explanation why such proposed modification would be obvious. MPEP §706.02.

18. In addition, the examiner must make the four factual inquiries sent forth by the Supreme Court in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966). Specifically, the four factual inquiries required by Graham are as follows:

- (a) Determining of the scope and contents of the prior art;
- (b) Ascertaining the differences between the prior art and the claims in issue;
- (c) Resolving the level of ordinary skill in the pertinent art; and
- (d) Evaluating evidence of secondary consideration.

19. The applicant respectfully submits that these factors have not been appropriately applied in this case. The examiner simply fails to determine the scope of the instant invention and the cited prior reference for rejecting claims 11-19 under 35USC103(a). The examiner asserts that it is well-known to construct as many or as few levels of roads as deemed necessary to meet design traffic demand. The applicant respectfully submits that the main patentable subject matter of the instant invention is NOT the division of layers of traffic flow. Rather, the instant invention relates to layers of road which support different social and community activities. The lower layer of road is exclusively used for traffic flow, while the upper layer of roads are exclusively reserved for people. The result is that traffic and normal social or community activities do not interfere with each other so as to maximize the efficiency of each kind of activity.

Accidents relate to this interference can also be minimized, and these in turn minimize the overall social cost in dealing with the related problems.

20. Other unexpected results include energy saving. A width of the manway can be made to be less than the width of the motorway so that natural light can easily reach the motorway through any gap between the upper layer and the lower layer of the urban road system. The gaps also provide natural ventilation for the motorway so that the cost for maintaining the motorway can be optimized.

21. The instant invention optimally utilizes two layers of roads for serving completely different purposes, wherein the these two layers of roads are specifically designed to operate with surrounding building so as to provide a fully convenient and optimal community system. As a result, the buildings are built from the manway so as not to interfere with traffic flow of the motorway. Parking may be made on arterials layers. Alternatively, parking sites can also be located at the motorway for convenient access to vehicles. It is estimated that a city implementing the urban road system of the instant invention would save a substantial amount of energy as compared to existing road system. In other words, the instant invention is, in a sense, an environmentally friendly urban system.

#### **The Cited but Non-Applied References**

22. The cited but not relied upon references have been studied and are greatly appreciated, but are deemed to be less relevant than the relied upon references.

23. In view of the above, it is submitted that the claims are in condition for allowance. Reconsideration and withdrawal of the rejection are requested. Allowance of claims 21-35 at an early date is solicited.

24. Should the examiner believe that anything further is needed in order to place the application in condition for allowance, he is requested to contact the undersigned at the telephone number listed below.



Respectfully submitted,

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